

Title (en)

A unit for converting solar energy and/or thermal energy into electric power

Title (de)

Ein Gerät zur Umwandlung von Sonnenenergie und / oder thermische Energie in elektrische Energie

Title (fr)

Une unité pour convertir l'énergie solaire et / ou d'énergie thermique en énergie électrique

Publication

EP 2246914 A1 20101103 (EN)

Application

EP 10161328 A 20100428

Priority

IT MO20090101 A 20090428

Abstract (en)

A unit for converting solar energy and/or thermal energy into electric power, which comprises a structure (101) for supporting a plurality of elements that collect the solar energy and/or thermal energy to be converted, which are at least mutually connected functionally, and comprises means (103) for recovering thermal energy released by the collecting elements, the means being heated by them and being associated with the supporting structure (102), comprising: at least one shimmed element (104) with a first end (105) that is associated with the recovery means (103) and a second end (106) that lies opposite the first end (105) and is associated with cooling means (107) in order to obtain a thermal gradient between the ends; the shimmed element (104) comprising a PNP material of the type of junctions at least of metallic oxides and/or alloys, which comprise at least one among the elements comprised in the group of magnesium, copper, aluminum, gold and elements with electrochemical potential that are similar to them, interposed between the ends (105, 106) and adapted to emit an electromotive force in order to recover and make available electric power from the temperature difference between the first and second ends (105, 106).

IPC 8 full level

H10N 10/13 (2023.01); **H01L 31/058** (2006.01); **H10N 10/17** (2023.01); **H10N 10/855** (2023.01)

CPC (source: EP US)

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Citation (search report)

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